Applicant: Rueger et al. Serial No.: 08/937,501

Page 2

In the Claims:

Kindly amend claims 82-84 and 88-93 as follows:

- 82. (Amended) A method of treating amyotrophic lateral sclerosis, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:
 - (a) having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];
 - (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
 - (c) defined by Generic Sequence 6 [7], SEQ ID NO: 31 [4]; and
 - (d) [defined by Generic Sequence 8, SEQ ID NO: 5;
 - (e) defined by Generic Sequence 9, SEQ 10 NO: 6;
 - (f) defined by Generic Sequence 10, SEQ ID NO: 7, and
 - (g)] defined by OPX, SEQ ID NO: 29[3],

wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*.

- 83. (Amended) A method of treating multiple sclerosis, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:
 - having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];
 - (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
 - (c) defined by Generic Sequence 6/7, SEQ ID NO: 31 [4]; and
 - (d) [defined by Generic Sequence 8, SEQ ID NO: 5;
 - (e) defined by Generic Sequence 9, SEQ\ID NO: 6;
 - (f) defined by Generic Sequence 10, SEQID NO: 7, and

Applicant: Rueger et al. Serial No.: 08/937,501

Page 3

(g)] defined by OPX, SEQ ID NO. 29 [3], wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*.

- 84. (Amended) A method of treating a spinal cord injury, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence.
 - (a) having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [380-431] of SEQ ID NO: 5 [2];
 - (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
 - (c) defined by Generic Sequence [7], SEQ ID NO: 31 [4]; and
 - (d) [defined by General Sequence 8, SEQ ID NO: 5;
 - (e) defined by Generic Sequence 9, SEQ ID NO: 6;
 - (f) defined by Generic Sequence 10, SEQ ID NO: 7, and
 - (g)] defined by OPX, SEQ D NO: 29 [3],

wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*.

88. (Amended) A method of restoring motor function in a mammal afflicted with amyotrophic lateral sclerosis, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:

- having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];
- (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
- (c) defined by Generic Sequence 6 [7], SEQ ID NO: 31 [4]; and
- (d) [defined by Generic Sequence 8, SEQ ID NO: 5;

Concla

Applicant: Rueger et al. Serial No.: 08/937,501

Page 4

(e) defined by Generic Sequence 9, SEQ ID NO: 6;

- (f) defined by Generic Sequence 10, SEQ ID NO: 7, and
- (g)] defined by OPX, SEQ ID NO: 29 [3],

wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell in vitro.

- 89. (Amended) A method of restoring motor function in a mammal afflicted with multiple sclerosis, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:
 - (a) having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];
 - (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
 - (c) defined by Generic Sequence 6 [7], SEQ ID NO: 31 [4]; and
 - (d) [defined by Generic Sequence 8, SEQ ID NO: 5;
 - (e) defined by Generic Sequence 9, SEQ ID NO: 6;
 - (f) defined by Generic Sequence 10, SEQ ID NO: 7, and
 - (g)] defined by OPX, SEQ ID NO: 29 [3],

wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*.

(Amended) A method of restoring motor function in a mammal afflicted with a spinal cord injury, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:

(a) having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];

Cox

90.

Applicant: Rueger et al. Serial No.: 08/937,501

Page 5

Sul cox

- (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
- (c) defined by Generic Sequence 6 [7]/SEQ ID NO: 31 [4]; and
- (d) [defined by Generic Sequence 8/SEQ ID NO: 5;
- (e) defined by Generic Sequence, SEQ ID NO: 6;
- (f) defined by Generic Sequence 10, SEQ ID NO: 7, and
- (g)] defined by OPX, SEQ ID NO: 29 [3],

wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*.

91. (Amended) A method of preserving motor function in a mammal afflicted with or at risk of amyotrophic lateral sclerosis, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:

- (a) having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];
- (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
- (c) defined by Generic Sequence 6 [7], SEQ ID NO: 31 [4]; and
- (d) [defined by Seneric Sequence 8, SEQ ID NO: 5;
- (e) defined by Generic Sequence 9, SEQ ID NO: 6;
- (f) defined by Generic Sequence 10, SEQ ID NO: 7, and
- (g)] defined by OPX, SEQ ID NO: 29 [3],

wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell in vitro.

92. (Amended) A method of preserving motor function in a mammal afflicted with or at risk of multiple sclerosis, comprising administering a morphogen comprising

Nort Nort

Applicant: Rueger et al. Serial No.: 08/937,501

Page 6

a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:

- having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];
- (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
- (c) defined by Generic Sequence 6 [7], SEQ ID NO: 31 [4]; and
- (d) [defined by Generic Sequence 8 SEQ ID NO: 5;
- (e) defined by Generic Sequence 9, SEQ ID NO: 6;
- (f) defined by Generic Sequence 10, SEQ ID NO: 7, and
- (g)] defined by OPX, SEQ ID NO: 29 [3],

wherein said morphogen stimulates production of an N-CAM or L1 isoform by an NG108-15 cell *in vitro*.

- 93. (Amended) A method of preserving motor function in a mammal afflicted with or at risk of a spinal cord injury, comprising administering a morphogen comprising a dimeric protein having an amino acid sequence selected from the group consisting of a sequence:
 - (a) having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1, residues 38-139 [330-431] of SEQ ID NO: 5 [2];
 - (b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
 - (c) defined by Generic Sequence 6 [7], SEQ ID NO: 31 [4]; and
 - (d) [defined by Generic Sequence 8, SEQ ID NO: 5;
 - (e) defined by Generic Sequence 9, \$EQ ID NO: 6;
 - (f) defined by Generic Sequence 10/7, SEQ ID NO: 7, and
 - (g)] defined by OPX, SEQ ID NO: 29 [3],

Cont